Supraorbital edges evenly divergent, slightly beaded, but without any marked postorbital thickening. Outer plate of anterior zygomaroot short and weak, scarcely projected forwards. Anterior palatine foramina long, reaching backwards just to the level of the front of  $m.^1$  Bullæ rather larger than in *M. macleari*, but far smaller than in *M. everetti*. Lower jaw very thin and slender, contrasting very markedly with *M. macleari* in this respect.

Teeth small and weak, their structure as usual. Front of incisors orange above, yellow below.

This fine Rat cannot possibly be confounded with any other known species of the genus<sup>1</sup>. Its size, peculiarly small and delicate head, short unicolor tail, large hands and feet, and powerful digging claws, separate it at once from any of its congeners. In some respects it agrees with the description given long ago by Hermann of his *Mus javanus*<sup>2</sup>, but its brown underside and naked tail prove that it is not really the same, and it is probable that Hermann's description was merely founded on an unusually large specimen of *Mus decumanus*.

The presence of a second large Rat in such a small island as Christmas Island is a very noteworthy fact, and recalls the state of things existing in Guadalcanar, Solomon Islands, where two still larger Rats, *Mus imperator* and *M. rex*, one terrestrial and fossorial, and the other arboreal, live side by side in the same locality <sup>3</sup>.

Mr. Lister is to be congratulated on his discovery of this, the largest member of the indigenous Mammalian fauna of Christmas Island. It is unfortunate that he did not succeed in obtaining a female specimen of it, as its mammary formula, perhaps the most important character within the restricted genus *Mus*, therefore remains still unknown.

## 6. On the Reptiles of Christmas Island. By G. A. BOULENGER.

#### [Received October 15, 1888.]

In addition to the three kinds of Reptiles <sup>4</sup> found on the island by the 'Flying-Fish' Expedition, examples of which were also obtained by Mr. Lister, we have to record two new Lizards, viz. a *Gecko*, and a Scink closely allied to the widely-distributed *Ablepharus boutoni*. Thus, of the five species of Reptiles now known to inhabit Christmas Island, four appear to be endemic, whilst the fifth, *Gymnodactylus* 

<sup>1</sup> Mus infraluteus, a species from Mount Kina Balu, North Borneo, described by the present author (Ann. & Mag. N. H. (6) ii. p. 409) since the above was written, has a considerable superficial resemblance to M. nativitatis. Its tail, however, is longer, and its skull is large and heavy, in due proportion to the size of the body.

<sup>2</sup> Obs. Zool. p. 63 (1804).

<sup>3</sup> See *suprà*, pp. 479-81.

<sup>4</sup> Gymnodactýlus marmoratus, Kuhl; Lygosoma nativitatis, Blgr.; and Typhlops exocati, Blgr. See P. Z. S. 1887, p. 516. 1888.]

marmoratus, is distributed over the greater part of the Malay Archipelago.

### GECKO LISTERI, Sp. n.

Head moderate, snout once and one third the diameter of the orbit, which equals its distance from the very small, round earopening; forehead scarcely concave. Head covered with small granules, which are considerably larger on the snout ; rostral quadrangular, more than twice as broad as deep, without cleft; nostril pierced between the rostral, the first labial, and three nasals ; twelve upper and ten lower labials; three transverse rows of small hexagonal chin-shields. Dorsal scales uniform, minutely grannlar; ventrals much larger, roundish hexagonal, subimbricate. Digits with a very slight rudiment of web ; seven or eight angularly curved lamellæ under the median toes. A short angular series of twelve præanal pores. Tail cylindrical, covered with uniform small flat scales, which are largest inferiorly. Pale grey-brown above, with a few rather indistinct brown spots and scattered white dots; a brown streak from the nostril to the eye; lower parts white, with small brown spots.

| millim            | millim.      |
|-------------------|--------------|
| Total length 79   | Fore limb 12 |
|                   | Hind limb 15 |
| Head 12           |              |
| Width of head 8.5 | ) Ian        |
| Body 29           |              |

This small species, of which a single male specimen was obtained, is closely allied to *G. pumilus*, Blgr., from Murray Island, Torres Straits, but at once distinguished by its nearly free toes.

## ABLEPHARUS EGERIÆ, Sp. n.

Snout pointed, rostral not projecting. Eye entirely surrounded with granules; upper eyelid represented by three or four larger scales. Rostral largely in contact with the frontonasal; præfrontals forming a long suture; frontal small, in contact with the first and second supraoculars; five supraoculars, second largest, fifth smallest; seven supraciliaries; interparietal distinct from the very large, single frontoparietal; a pair of large nuchals. Ear-opening rather small, oval. Scales smooth or feebly striated, two vertebral rows largest; 26 or 28 scales round the middle of the body. Limbs well developed, pentadactyle; the hind limb reaches the axilla in the male, the elbow in the female; digits long and slender, smooth inferiorly. Tail once and a half the length of head and body. Bronzy above, with blackish and pale greenish spots; a light, dark-edged dorsolateral band; end of tail blue; lower parts greenish white.

| millim.          | millim,              |
|------------------|----------------------|
| Total length 113 | Fore limb 17         |
| Head 10          | Hind limb $\dots 21$ |
| Width of head 6  | Tail 68              |
| Body             |                      |

[Dec. 4,

Several specimens. Closely allied to A. boutoni, Desj., from which it differs in the distinct interparietal shield.

#### LYGOSOMA NATIVITATIS, Blgr.

This species was established upon a single tailless specimen. Eight specimens were secured by Mr. Lister. The tail, when intact, is two thirds of the total length. Young with the dorsal scales strongly quinquecarinate.

# 7. On the Terrestrial Mollusks of Christmas Island. By EDGAR A. SMITH, F.Z.S.

#### [Received October 15, 1888.]

The only species of Land-shells at present recorded from Christmas Island are the two *Succineæ* and the two forms of *Melampus* obtained by the officers of H.M.S. 'Flying-Fish,' and recorded in the 'Proceedings' of this Society, 1887, pp. 517-518<sup>1</sup>.

Only one of these, Succinea solidula, Pfr., was obtained by Mr. Lister; who, however, succeeded in discovering seven additional species, four of which appear to be new to science.

The following is a list of all the known species :---

1. ARIOPHANTA (MICROCYSTIS) NORMANI, Sp. n.

2. ARIOPHANTA (MICROCYSTIS) MABEL 4, sp. n.

3. ARIOPHANTA (MICROCYSTIS) MILDREDÆ, Sp. n.

4. SUCCINEA SOLIDULA, Pfeiffer.

# 15 37 - 5. SUCCINEA SOLITARIA, Smith.

6. SUCCINEA LISTERI, sp. n.

7. PYTHIA SCARABÆUS, Linu.

-8 MELAMPUS LUTEUS, Quoy & Gaimard.

-9. MELAMPUS FASCIATUS, Deshayes.

10. TRUNCATELLA VALIDA, Pfeiffer.

11. LEPTOPOMA MOUHOTI, Pfeiffer, var.

The Pythia, the two Melampi, and the Truncatella are all widely ranging species, occurring in the Malay Archipelago and Polynesia. The Leptopoma, if I am right in its identification, occurs also in Camboja; and the remaining species, although at present known only from Christmas Island, may also have a wide distribution, as allied forms exist in the Philippines, Moluccas, &c.

<sup>1</sup> I take this opportunity of altering the name of the new species of *Littorina* described P.Z.S. 1887, p. 519. Reeve having already employed the name grano-costata, I propose to call the species from Christmas Island *L. insularis.* 

536